Chapter-1

PROLOGUE

1.1 INTRODUCTION

In a country like India whose economy mainly depends on agriculture, requires modernization and adoption of modern technologies in the field of agriculture. Due to growing population (over 1.2 billion by 2011) and agro raw materials for its industries and urban living, it requires higher agricultural yields by replacing traditional methods and practices which are still prevalent in the system. There are pockets of agricultural developments under Green Revolution, government initiation and changed policies. In the recent decades in many areas across the country agriculture has seen tremendous changes. Agricultural missions like Gold Revolution after Green Revolution has brought changes in yields and agricultural land use. This is happening amidst predominately vast areas of rainfed dry farming areas. Growing urbanization, rise in relatively standard of living vegetables, fruits and flower cultivation are on rise Globalization impact too can be seen with dotting of Green house agriculture where vegetable are cultivated by using limited water. In fact the main challenge to Indian agriculture is now the even decreasing water resources particularly declining underground water. Some of the problems persistently increasing in the field of agriculture are : (i) shortage of basic inputs at reasonable cost; (ii) paradoxically there is shortage of agricultural labourers foresting some farmers opting for free crop cultivation; (ii) often everybody growing same crop and leading to occasional glut in production wastage of agricultural produce; (iv) consequences leading to migration of
agricultural labour and families to leading cities; (iv) decline in cereals production, unsustainable cropping shortage fodder and the like are serious issues governing the present agricultural scenario in the country.

By and large the economy of the area is predominantly agricultural as much as sizeable percent of geographical area of the district is cultivated. About 70 percent of the population of the district is depending on agricultural activities. Any study on economic development for the district must place its trust on the development of agriculture, thereby boasting the economic prospects of the district. Agricultural production can be increased by maximum utilization of water and land resources efficiently. It must follow the selection of crops which most suit the area from the scientific point of view. The crops and the cropping pattern should be selected in the light of agro climatic and technological basis. Similarly the cropping pattern must be adopted in relation to time space sequence of the crops which affect the agricultural production as it ensures the greatest efficiency of agro-inputs like land, fertilizers and manures, irrigation, high yielding varieties of seeds and such other inputs. Generally the country as a whole and area under investigation in particular are under the impact of globalization and economic liberalization. So far the cropping patterns followed are mainly based on the traditional systems of subsistence farming. Till recent years, every farmer attempted to produce everything for the consumption of his family. Such cropping pattern hardly having significant contribution to the agro-economy of the area in general and any particular area except plantation regions in particular off late things have changed in the field of agriculture with production for often export and urban markets.
Agricultural development in India off late is driven by strong global market force and technological development which are happening in the field of micro-irrigation. Former is time in the case of certain horticultural crops like floriculture. It is now having agricultural enterprise abroad (Ramakrishna Khatori Ethiopia Rose Cultivation) expanding urban mall-shopping complexes have promoted Greenhouses specialized in the cultivation of vegetables, flowers etc. Impact of Globalization on agriculture is still in take off level yet; there are repercussions of that on socio-economic spheres of Indian farming community.

Developments of micro-irrigation in drought prone areas by strengthening the traditional rain harvesting techniques are need of the hour. It holds greater promise for the food security as India As huge agricultural area under this micro irrigation enhances agriculture production with other positive rural-urban linkages. Indian has rich agricultural machinery manufacturing base to supplement this micro irrigation scenario.

The Agro-economic development is a multidimensional process. Sound agro-economic growth implies a maximum utilization land. To access agricultural development under geographical perspective, one shall proceed to interpret the regional imbalances in the levels of different aspects of agricultural development. It has widely accepted view that the economic growth of less developed countries depends heavily upon improving the performance of the agricultural sector. Speedy agricultural development helps the process of economic growth in backward areas in many respects. By modernizing agriculture, agriculture output and income, the standard of living of the farm families go-up and thereby a country can establish new industries
which provides more employment opportunities, produce nutritious food, earn more foreign exchange and development of all economic sectors. Although, interregional variations bound to be occur because of differences in geo-physical conditions, irrigational facilities, availability of agricultural inputs and infrastructure and others. A regional balance or elimination of variations in the level of agricultural development and different regions has all along been one of the principle objectives of the planned development in India. A high priority has been given to agricultural development in all the five year plans of India. As a result, agriculture is progressed and productivity has gone up in recent years. The progress, however is not uniform all over the country.

1.2 STATEMENT OF THE PROBLEM

The title of the thesis is self explanatory as it is a district (Meso-regional) level study of agriculture. Agricultural aspects like landuse changes, agricultural crops cultivated in different years form the basis of this research investigation. Allied aspect like prevailing irrigation scenario has been examined. These aspects are spatially dealt in ten taluks of Tumkur district. Comparative Analysis of aforesaid aspects of agriculture has been analyzed temporally from 1985-86 to 2005-06 for the period of two decades. In order to bring out the impact of globalization on its agriculture with the district’s vicinity to Bangalore Metropolis Greenhouses, horticultural crops with special reference to floriculture have been examined. The study consists of strategies of the sustainable agriculture development in the district. This encompasses need for the introduction of micro irrigation in the district. Apart from these
aspects overall scenario of agro based industries has been examined to understand to agro-economic development in the study region.

1.3 STUDY AREA

Present piece of research is on Tumkur district of south-eastern Karnataka state in South India. Tumkur district belongs to the group of districts called south-eastern maidan districts of Karnataka. It is situated in the east-central part of the Decca Plateau (See Fig. No.1.1). It lies particularly to the south east section of Karnataka. Tumkur district is bounded on the North by the Ananthapur district of Andhra Pradesh, on the East by the district of Kolar and Bangalore, on the South by Mandya district, on the west and North West by the districts of Hassan. In the mid west it is bounded by the districts of Hassan and Chikmagalur. A special feature of the districts is the Pavagada taluk which is totally detached from the remaining area of the district. It is almost surrounded on all sides by territories belonging to Andhra Pradesh. The district is situated between the 12° 45’ N and 14° 20’ N. latitudes and 76° 20’ E to 77° 31’ E longitudes.

Area wise Tumkur district has 1064.70 thousand hectares (10596 KM²) where it accounts for 5.5% of the state geographical area. It is the third largest district in terms of area in the Karnataka state.

The district has been divided into 10 taluks for administrative purpose. They are Chikkanayakanahalli followed by Gubbi, Koratagere, Kunigal, Madhugiri, Pavagada, Sira, Tiptur, Tumkur and Turuvekere. The area consists of ten taluks, 10 urban centers, 50 hoblies, 321 grama panchayats, 4 municipalities with 2708 inhabited villages in the district.
<table>
<thead>
<tr>
<th>SL No</th>
<th>Taluks</th>
<th>Geographical Area</th>
<th>Hoblies</th>
<th>Cities/Towns</th>
<th>Grama Panchayats</th>
<th>Villages in Nos.</th>
<th>Population As per 2011 Census</th>
<th>Urban population as per 2011 Census</th>
<th>Rural Population /As per 2011 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>In 000 Hac.</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td>In Nos.</td>
<td>%</td>
<td>In Nos.</td>
</tr>
<tr>
<td>1.</td>
<td>C.N. Halli</td>
<td>113.00</td>
<td>10.60</td>
<td>5</td>
<td>1</td>
<td>28</td>
<td>234</td>
<td>212063</td>
<td>7.91</td>
</tr>
<tr>
<td>2.</td>
<td>Gubbi</td>
<td>122.10</td>
<td>11.40</td>
<td>6</td>
<td>1</td>
<td>33</td>
<td>346</td>
<td>262291</td>
<td>9.79</td>
</tr>
<tr>
<td>3.</td>
<td>Koratagere</td>
<td>70.90</td>
<td>6.60</td>
<td>4</td>
<td>1</td>
<td>23</td>
<td>251</td>
<td>168039</td>
<td>6.27</td>
</tr>
<tr>
<td>5.</td>
<td>Madhugiri</td>
<td>112.10</td>
<td>10.50</td>
<td>6</td>
<td>1</td>
<td>39</td>
<td>320</td>
<td>267935</td>
<td>10.00</td>
</tr>
<tr>
<td>6.</td>
<td>Pavagada</td>
<td>135.80</td>
<td>12.80</td>
<td>4</td>
<td>1</td>
<td>33</td>
<td>147</td>
<td>244072</td>
<td>9.11</td>
</tr>
<tr>
<td>7.</td>
<td>Sira</td>
<td>155.00</td>
<td>14.60</td>
<td>5</td>
<td>1</td>
<td>36</td>
<td>249</td>
<td>313614</td>
<td>11.70</td>
</tr>
<tr>
<td>8.</td>
<td>Tiptur</td>
<td>76.50</td>
<td>7.30</td>
<td>4</td>
<td>1</td>
<td>26</td>
<td>231</td>
<td>222503</td>
<td>8.30</td>
</tr>
<tr>
<td>9.</td>
<td>Tumkur</td>
<td>103.80</td>
<td>9.70</td>
<td>6</td>
<td>1</td>
<td>41</td>
<td>373</td>
<td>596347</td>
<td>22.24</td>
</tr>
<tr>
<td>10.</td>
<td>Turuvekere</td>
<td>76.00</td>
<td>7.20</td>
<td>4</td>
<td>1</td>
<td>26</td>
<td>243</td>
<td>168890</td>
<td>6.30</td>
</tr>
<tr>
<td></td>
<td>District Total</td>
<td>1064.70</td>
<td>100.00</td>
<td>50</td>
<td>10</td>
<td>321</td>
<td>2708</td>
<td>2681449</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Data compiled from district at a glance 2011-12, Government of Karnataka.

Note: * Net sown area accounts for 59.34 percent of geographical area (2011-12).
In Karnataka, there are 30 districts (2011) out of which Tumkur district accounts for 5.5 percent of area and 4.4 percent of population of Karnataka state. In 2011 Tumkur district had a total population of 26,81,449, in which 602784 (22.48%) was rural and 20,78,665 (77.52%) was urban population. In the total population there were 13,54,770 males (50.53%) and 13,26,679 (49.47%) females. The general population literacy was 74.32%, in which male literacy was 82.05% and that of female was 66.45% sex ratio is very close to average sex ratio of 979/1000 males of Karnataka.

The whole district forms a part of rain shadow region of peninsular India and some its eastern taluks are part of drought prone region of central south-eastern India. This district receives around 660 mm of annual average rainfall which is again is erratic forcing the whole agriculture to depends on rainfed ground water and tanks. It is dominant in land agriculture due to no major river and irrigation projects. District is closer to Bangalore city 55-160 km which has created a sort of ‘push’ conditions in terms of rural urban migration. District has three national highways (NH-48, NH-206, NH-4), with a railway line (Bangalore-Miraj Broad-gauge line). District has relatively better all weather roads. (National Highway 325.90 KM, State High way 632.21KM, Major District Roads 3752.48 KM) District has more or less dominant in agro based industries than other forms of industries. It has made a mark in coconut production and its industries particularly in Tiptur and other western taluks.
1.4 REVIEW OF LITERATURE

Sanjay K. Singh (2010) in his article More Resource Allocation for Research Necessary in the Hindu Survey of Indian Agriculture 2010 discussed the importance of integrated horticultural developmental programs in India. In order to increase the yields of horticultural crops like fruits and vegetables he stresses the needs for risk management, disaster preparedness and other contingency plans for better crop production. In fact he has discussed the importance of horticulture development to meet the growing domestic need and also export potential.

Majid Hussain (2010) in his Agricultural Geography he has described the genesis of agriculture. He has classified agricultural pursuits. His book provides valuable theoretical frame work for agriculture by introducing basics of crop combination. Crop diversity which help ultimately for the systematic delineation of agricultural regions.

Rakesh Tuli et al. (2009) in their article on floriculture of India in the Hindu Survey of Indian Agriculture 2009 have discussed the application of the advance technologies like fertilizer management and plant genomes, to improve the yields of flowers. At the same time they have brought the necessity of using these technologies under global climatic change.

Lakshman C.M. (1997) in his thesis “population change and socio-economic development of Tumkur district” had dealt extensively the growth and developmental issues of various socio-economic issues of Tumkur District in his study period. He has gone into details of agriculture other socio-
economic aspects of select 42 sample villages in the district, apart from this sufficient light has been thrown on both rural and urban development parameters which have helped the local governmental organization to formulate developmental policies related to population health, rural industries and agriculture. Investigator has suggested that sericulture and rural dairy are very much needed to contain rural urban exodus. Interesting aspect of this unpublished thesis in Bangalore University is that last chapter deals with comprehensive view of development in Tumkur district where he has comprehensively viewed the hierarchy of ten taluks from the point of view of development.

Singh D.N. (1992) in this valuable article on “population growth and Economic Development” the author brings out the inter-relationship between the population growth and economic development. His article has rich reference to the aspect of population growth and economic developments internationally acclaimed social scientists are cited in the work. Ultimately acclaimed social scientists are cited in the work. Ultimately he dwells on the case of India, the traces the growth of population and paradoxical situation of the India to its high population and poor economic development.

Nandini Chatterjee (1990) in her study attempted to evaluate cropping pattern and cropping intensity with irrigation. She found that success of irrigated agriculture in West Bengal is best reflected in cropping intensity rather than net sown area. This may be due to large population in the state that limits the scope for extension of cultivable lands. It was further observed
that cropping intensity has been influenced by ecological settings and seasonal nature by functioning of the different irrigation types.


Venkaiah V. (1987) in his book took up a study of impact of agro-based industries on the rural economy of Andhra Pradesh. He has made a study of various issues connected with the impact of location of agro-based industries in rural areas on the rural economy in terms of changes in occupational structure of the working population of rural areas, changes in the levels of income and reduction in income disparities. The employment opportunities created and the rural-rural, the rural-urban and urban-rural migration. He has already shown how the location of agro-based industries in rural areas brings about rural transformation in various aspects. A point of interest is that some agro-based industries have greater potentialities of promoting employment to the rural people than others.

Chandna R.C. (1986), in his valuable text book, “Geography of Population” deals with comprehensive topical details of population distribution, change, migration and other related demographic issues. He brings out the basic aspects of population geography. In this revised version, the author gives a comprehensive and precise concept of population geography. The book contains useful methodological framework of
population geography which is useful for both teachers and researchers. This book while giving various attributes of population has ample national level and extensive information of global population.

Rao V.K.R.V. (1978), Planning in perspectives, policy choices in planning for Karnataka 1973-74 to 1988-89. This book contains seventeen valuable papers about long term perspectives of development in Karnataka. These articles on perspective plans for development have been discussed for a period of 1973-74 to 1988-89 for the Karnataka state. This book contains in depth views particularly on the economic development of Karnataka. Aspects like macro perspectives on goals targets and strategy, natural resources, human resources, development of agriculture, industries, power, transport and education have been dealt by various authors keeping the aforesaid time period in view. Along with policy choices in economic sphere of planning for Karnataka, several authors have contributed to the social and economic development. In this collective work, we see articles on human resources, agricultural development, industries particularly agro based industries, transport and other policy and programme imperatives have been discussed.

Swaminathan (1977). The new technology of course, brought in a production boom in several crops, which is still continuing in many regions. The bulk of increased food production at least in the immediate future will come from further expansion of irrigated areas and from the technology already available in the areas of water availability.
**Holy (1977).** Irrigation in modern times has been adopted as technology in a sense that applications of water to the growth of different crops, suiting to the soil features and crop requirements have been timely followed in a scientific manner. Hence irrigation is an innovative breakthrough in the traditional type of agricultural practices and methods.

**Singh Jasbir (1976)** explains that productivity as defined in economics or agricultural geography means output per unit of input or per unit of area. Productivity and the improvement in agricultural productivity are generally the result of a more effective use of the factors of production viz., environmental arable land, labour and capital. Productivity industrial or agricultural is a difficult one both in concept and terms of measurements of its level. Therefore, any definition that is adopted is bound to suffer from certain weakness. It is important to remember that productivity is a physical factor rather than a value concept, which describes the relationship between the output and the major inputs utilized in production Rao U.K.R.V. (1962).

**Arora R.C. (1976)** in his book 'Development of Agriculture and allied sector' states irrigation is one of the important inputs of agriculture which leads to changes in socio-economic bases of society. It is explained that new agriculture for intensive and more economic agricultural operations and success is linked with the development of irrigation. The success of agriculture depends to a large extent on how successfully water requirements of different agricultural crops.
Vohra B.B (1973) in the character for the land, economic and political weekly emphasized the importance of charter for the land, which provides a basic and essential knowledge to geographers for the proper planning of the development of agriculture in a region.

Siddiqui (1973) in his book “Land Classification for Agricultural Planning” states in a small area, to study how far the proportion of cultivable wasteland, size of holdings, irrigational practices, cropping pattern, problems of mixed cropping and the extent of area sown more than once are controlled by the edaphic factors.

Kariel and Kaves (1972) emphasized that land use is an important aspect of geographic studies particularly relevant to agricultural geography. However, this concept has been used in so many different ways that no one generally accepted scheme of classification existed despite many years of land use studies by geographers.

Gazetteer of Tumkur District (1969). This is a publication by erstwhile Government of Mysore which gives the physical background with topics covering social and economic history of Tumkur District. Emphasis is laid on more details of socio-economic factors. This publication gives the economic aspects of agriculture and irrigation, industries and banking of the district. Similarly, it also gives more useful information about education, public life and voluntary social service organization and other social services in Tumkur district till 1969. Other aspects like administration of revenue law and order and justice are given with detailed historical perspective. Though it is a
gazetteer, information given covers the basic knowledge of Tumkur district right from historical emergence of district to the present socio-economic agro-economic and administrative aspects.

Trewartha (1953), points out that the essence of population geography lies in understanding the regional differences in the people covering the earth. The central theme of the science of population geography is its aerial differentiation. It is essential to understand the process of spatial organization. Population constitutes the most dynamic and central element in such a process (1969).

1.5 OBJECTIVES OF THE STUDY

The present study has the following objectives:

1. The present study aims to understand the geographical aspects i.e., the human aspects of the Tumkur district.

2. The main objective is to highlight the agro-economic development of the district under space and time perspective for which its ten taluks and time from between 1985-86 to 2005-06 have been selected.

3. Investigation aims to study the general land use pattern with special reference to agriculture under the selected time period.

4. To understand the distribution and development of irrigation facilities with reference to ultra modern methods which are being recently being started in the district.
5. To understand the prevailing agricultural land use and its dynamics of cropping pattern under the influence of both irrigation. It emphasizes further need for micro irrigation in this rainfed area.

6. To highlight the spatial variation with regard to concentration of important crops cultivated.

7. To understand the changes in the occupations in relation to changing agricultural scenario from 1985-86 to 2005-06.

8. Spatial emphasis is laid in the investigation on recent development in agriculture like "Greenhouse" farms, development of horticulture and floriculture. This has been examined in the light of recent globalization and the vicinity of the study area to Bangalore city.

9. Further emphasis is given to analyze the spatial distribution of agro-processing industries in the district.

10. Present piece of research aims to provide a comprehensive overview of Agro-economic development by integrating related issues under its ten taluks of Tumkur District.

1.6 METHODOLOGY

Present research on 'spatio-temporal variations in Agro-Economic Development: A Case Study of Tumkur District" is based in general on the data from both secondary and primary sources. General agricultural scenario has been studied on secondary data. Recent technological aspects in agriculture and impact of globalization on agriculture in the district are based on the generation of primary field survey with some secondary data from relevant sources.
The data collected have been processed, tabulated and presented in the form of Charts, Graphs, and Maps. In order to minimize the anomalies in data arising out of fluctuations in all aspects of agriculture in district, the present study has adopted simple statistical techniques. Some of them have been modified to provide more accurate results in the present analysis for the study.

The secondary data was collected from different sources like –

- Bureau of Economic and Statistics, Government of Karnataka, Bangalore.
- Tumkur District at a Glance, Government of Karnataka, Tumkur.
- Tumkur District Agricultural, Horticultural Department.
- Karnataka Agriculture and Horticulture Department, Lalbagh, Bangalore.
- Taluk level Agricultural and Horticultural related Departments.
- Library and Information through websites.
- Data and Information have been gathered and used from articles, books, journals, periodicals and statistical handbooks.

Methodology used in the present piece of research on Tumkur District can be viewed thematically through the following flow diagram (See Flow Diagram-1).
Chapter I

Identification of Problem

Statement of the Problem

Review of Literature

Setting Objectives

Collection of Data

Primary Data

Secondary Data

- Personal meetings with the horticulture and floriculture farmers,
- Agro based industries
- Data Input

- National, State and District level data non Government offices.
- Maps

Data Analysis and Manipulation

- Statistical Analysis-Averages, percentages, etc.,
- Graphs
- Pie Chart

Report Drafting

Findings and Suggestions
1.7 HYPOTHESES:

In order to facilitate further investigation through data collection and analysis and related aspects of the present study on “Spatio-Temporal Variations in Agro-Economic Development: A Case Study of Tumkur District”, following tentative hypotheses have been formulated and also they have been tested in the study.

1. In Tumkur district which has high proportion of dry land agriculture supports moderate rural population density. With risen irrigation potential of all types has distinct impact on various demographic aspects.

2. Tumkur district has seen in the recent decade’s enormous rise in Tube-well irrigation in its all taluks. Southeastern taluks have seen canal irrigation (Hemavathy), which has brought observable changes in agricultural landuse.

3. Due to both natural and man made factors there is a substantial rise in follow land in the recent decades.

4. Since 1980’s Tumkur district has seen marginal reduction in cereals production. At the same time there is a substantial rise in non cereals crops like groundnut, coconut and horticulture crops.

5. Agro-economic development in Tumkur District has close relationship with the impact of globalization on its agriculture. Consequently greenhouses are growing horticultural crops under intensive crop management. Growth in agro-based industries, rise in transport vehicles and even supply of special arid crops to nearby urban markets (Bangalore-Mysore, Hassan etc) is on rise.
1.8 SCOPE AND LIMITATIONS OF THE STUDY:

The scope of the study lies in understanding the spatio-temporal variations in agro-economic development in twenty years period it helps in understanding of the agro-economic development at taluk level. According to the investigation of agro-economic development, there is a observable redistribution of agricultural crops and its resources.

In these days of decentralized planning the study is useful for administration and also for planning at the district level. Issues covered under agricultural development programme under the schemes of Suvarna Krishi Honda, Jalasamruddi Yojana, Karnataka Seed Mission, Establishment of Flower action centres, Karnataka Farm Mechanization Mission etc., will help in effective implementation in agricultural development.

The aim of the present study is to bring out the spatio-temporal variations in agro-economic development at taluk level and its time span has been fixed for the period of 20 years (i.e. 1985-86 to 2005-06). Two points of time at an interval of 20 years are chosen for the analysis of agro-economic development. It is not possible to increase the study period or scope to other points of time because of limitations of researcher and time constraint.

1.9 ORGANIZATION OF THE THESIS:

The present study is an attempt to measure and explain the agro-economic development that has taken place from 1985-86 to 2005-06 in Tumkur district. The study ahs been accomplished by organizing systematically into seven chapters, each one of them is having an introduction, relevant to the theme of the chapter, a review of literature and
methodology used, followed by the findings of the study and at the end references are given.

Chapter-1: Prologue introduces the topic of the study and deals with introduction, identification of the problem, significance of the study area, review of related literature, objectives of the study area, methodology of the study, hypothesis, scope and limitations of the study and organization of the thesis.

Chater-2: Regional Setting of the Study Area deals with a brief introduction of geographical location, size, administrative units, geology, topography, drainage system, general climatic conditions, natural vegetation, soil and also it deals with socio-economic background of the Tumkur district. Description of this physical and socio-cultural scenario of the district is supported by relevant tables and figures.

Chapter-3: This chapter goes into the Demographic dimensions and Human Resources in Tumkur District. It explains the demographic factors, growth of population, spatial distributional pattern of population, growth and distribution of rural and urban population, population density, sex ratio, literacy occupational characteristics of population, taluk wise occupational structure and others have been discussed.

Chapter-4: Disparities in Spatial Pattern of Agricultural Landuse: The theme of this chapter. It analysis the classification of landuses in general land use pattern including forest, land not available for cultivable waste, other cultivated land fallow land, net sown area, spatial pattern of agricultural land use have been discussed in this chapter.
Chapter-5: In this chapter Aspects of both Land and Water-Disparities in the Utilization of Land and Water Resources of Tumkur District are discussed. The relevant data and tables have been discussed with figures. It goes into the details of irrigation like canal irrigation, well and tube wells irrigation, tank irrigation, other sources of irrigation. Further it also explains evolution of irrigation, evaluation of irrigation in Tumkur district, development of ground water resources, intensity of irrigation in the district have been discussed on taluk wise for different years.

Chapter-6: Under this chapter one can see the details of Spatial Dynamics of Agricultural Crops in Tumkur District. Agricultural landuse, crop intensity, crop efficiency, general cropping patter have been discussed. However, the chapter first deals with spatial distributional pattern crops like cereals, pulses, oil seeds, cash crops, horticulture crops and floriculture crops.

Chapter-7 After covering conventional agricultural scenario in the previous chapters, this last chapter looks into recent developments in agriculture in the Tumkur District under the heading “Comprehensive View of Agro-Economic Development In Tumkur District.” They are the aspects, impact of globalization on agriculture in Tumkur district along with the greenhouse based agriculture. Agro-industrial scenario of the district farms the one of the final aspects of this chapter.

Finally epilogue would summarises and concludes the findings of the research. It also incorporates suggestions and strategies for further agro economic development in Tumkur district. It provides appropriate strategies for agriculture development which will go a long way in mitigating problems in the study region.